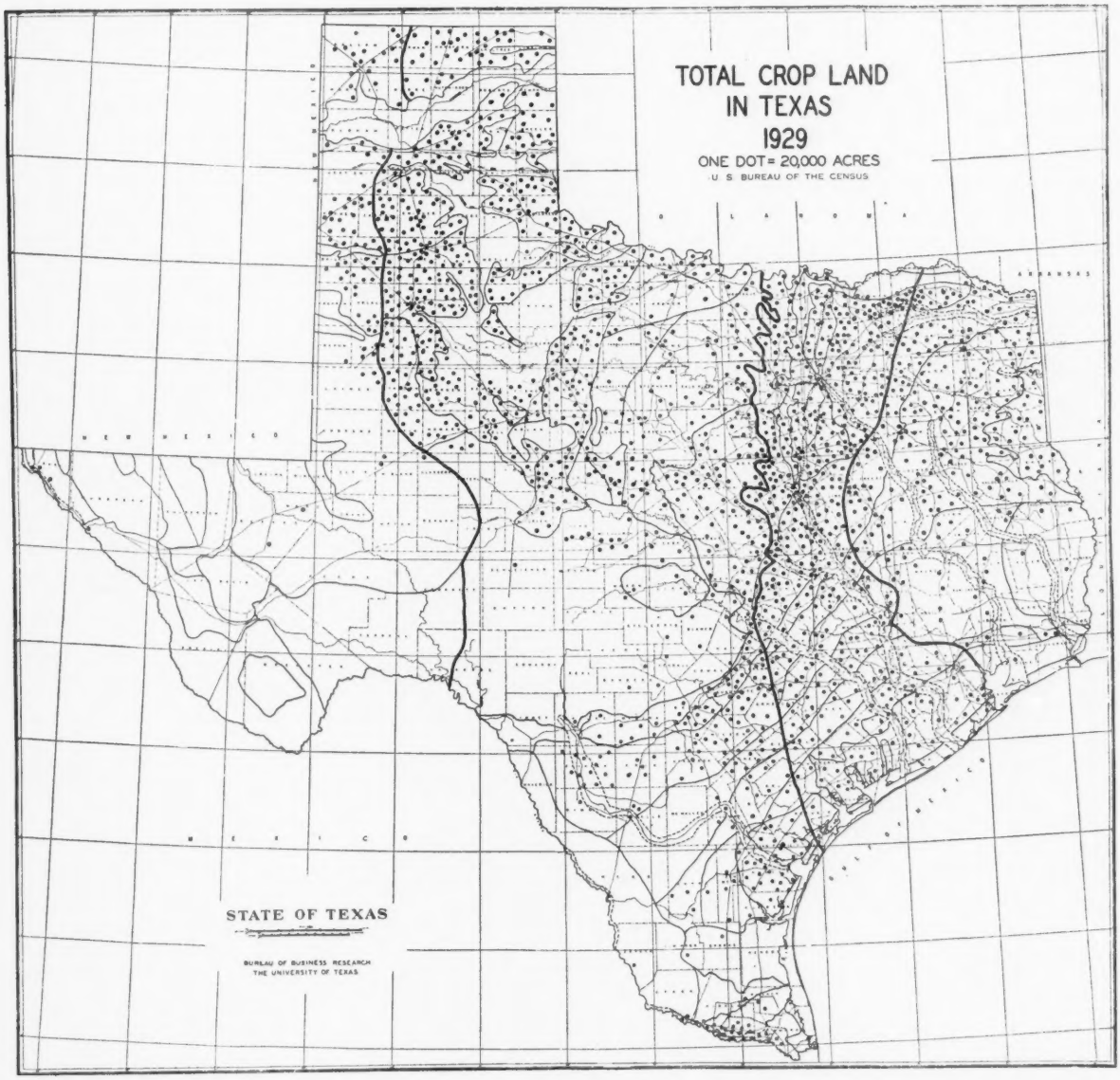
TEXAS BUSINESS REVIEW

Bureau of Business Research
The University of Texas

Vol. X, No. 10 November 28, 1936



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TEXAS BUSINESS REVIEW

A Monthly Summary of Business and Economic Conditions in Texas and the Southwest
Bureau of Business Research, The University of Texas, Austin, Texas

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Business Review and Prospect

A well known analyst is of the opinion that we are in a recovery movement which has gained strong momentum and which promises to continue for many months to come. It is still predominantly a consumer's goods recovery; and in keeping with that characteristic it promises to produce, in this month and next, the best holiday trade since that of the prosperity years. It is a recovery strongly supported by large governmental expenditures, and that condition is likely to be maintained.

There are three parts of our business economy which are still operating at levels that are far below normal and which account for most of our unemployment. These are construction, the making of capital goods, and our export trade. We are making gradual progress in all of them, and it does not appear probable that the election results will either accelerate or retard the rate of improvement.

Construction is increasing in volume, but it is held back by high costs. A vast amount of governmental money and effort has been devoted to its stimulation, but without availing much to speed up private expenditure.

The production of capital goods is largely dependent on new financing by corporations. The volume of new financing depends on the degree of willingness that business leaders may have to assume new risks in the hope of making greater profits. It depends on long-range confidence in the future, and the continuing development of this recovery depends on the rate at which that kind of confidence increases. World conditions largely beyond our control will probably determine the near-future of our foreign trade.

TEXAS BUSINESS

The October business index for Texas, computed from employment, pay rolls, miscellaneous carloadings, crude runs to stills, department store sales, and electric power consumption is 91.8, compared with 91.7 in September and 77.6 in October 1935. The gain over a year ago is 18 per cent, and all of the factors contained in the index contributed to the increase.

Beyond doubt this well rounded improvement in Texas industry and trade helps to explain the remarkable increase in retail sales during October compared with last year as shown later in the REVIEW, in spite of the moderate decline in the index of farm cash income.

Additional factors contributing to the marked rise in retail sales are Federal expenditures, both in rural and urban centers, and the credit agencies which the government has promoted, which have materially lightened mortgage and interest burdens and thus have released funds for the purchase of merchandise. On top of all these influences is the greater optimism which already prevails and which is rapidly growing.

STATE INDEX OF FARM CASH INCOME

The October index of farm cash income for Texas rose four points above that of September after adjustment was made for seasonal variation, but it was more than three points below that of October 1935. This drop in the State index was to be expected because of the earlier than usual marketings of cotton, which raised the September farm cash index sharply above that of a year ago.

A brief explanation should perhaps be made of why it is that although the actual farm cash income for Texas during October was less than in September, the index should have risen about four points. As was pointed out in the October issue of the REVIEW, the average monthly farm cash income during the base period (1928–32) was $41,000,000. But normally during this period 280.7 per cent of this average monthly income was received in September, and 248.6 per cent was received in October, or $115,000,000 and $102,000,000, respectively. In September this year the farm cash income was a little over $87,000,000, or 75.9 per cent; and in October, a little over $82,000,000, or 79.8 per cent.

DISTRICT INDEXES OF FARM CASH INCOME

District 1–N, the northern Panhandle, receives the bulk of its farm cash income from wheat and live stock, only a small portion coming from cotton. The index of income in this district for October is 56.4, which is slightly below the 58.6 in September but well above that of October 1935, when it was 49.4. These figures show the extent to which farm cash income must still increase in this district to reach the level attained during the base period (1928–32).

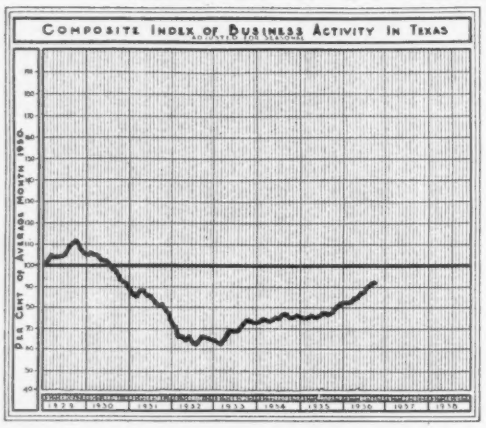
In district 1–S the index rose to 162.6 in October from 67.8 in September. The index for October 1935 was 84.9. The increase in farm cash income in this district during October is largely the result of three factors: a substantial increase in cotton production in comparison with last year; the earlier marketing of the cotton; and a sharp increase in shipments of hogs and sheep, together with a moderate increase in shipments of calves. It is noteworthy that retail sales in district 1–S during October showed the greatest increase over the corresponding month last year of any district in the State.

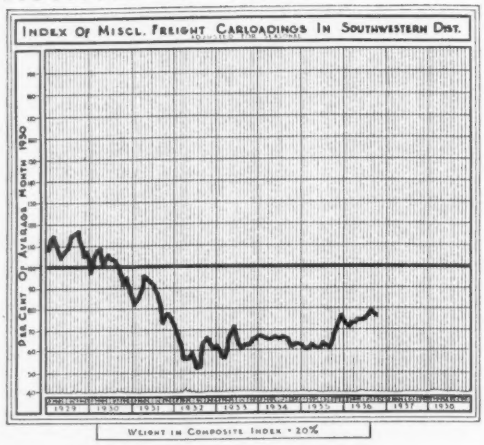
The index for district 2 fell from 76.0 in September to 62.6 in October. The index for October 1935 was 83.9. Cotton plays the dominant part in farm cash income in this district, and the crop this year was only two-thirds of that a year ago. Moreover, marketings of cotton began in this district earlier than a year ago, thus helping to raise the index in September. An additional factor contributing to the drop in the index was the decline in marketings of cattle, calves, and sheep. Retail sales in this district made the poorest showing in comparison with last year of any district in the State.

Income in district 3 is influenced less by cotton and more by live stock than is either of the adjacent districts on the west and east. Yet the decline in cotton

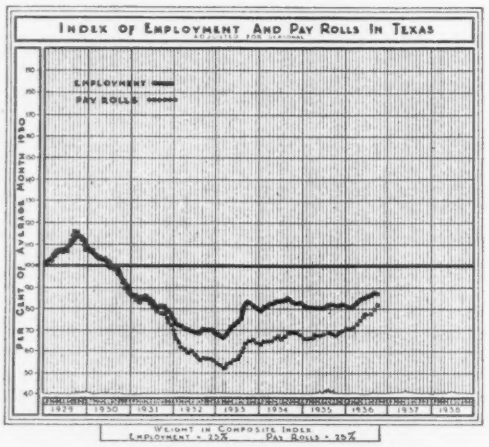
(Continued on page 5)

INDEXES OF BUSINESS ACTIVITY IN TEXAS

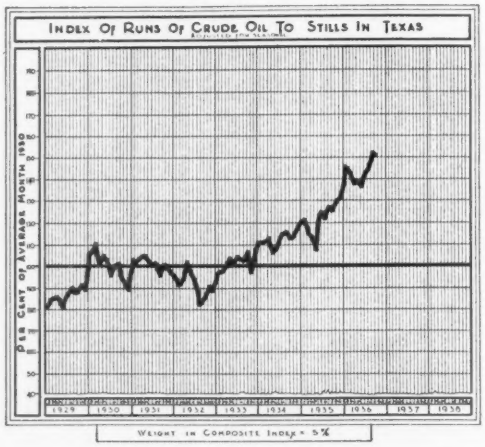

COMPOSITE INDEX OF BUSINESS ACTIVITY IN TEXAS
ADJUSTED FOR SEASONAL
PER CENT OF AVERAGE MONTH 1930
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938


INDEX OF MISCL. FREIGHT CARLOADINGS IN SOUTHWESTERN DIST.
ADJUSTED FOR SEASONAL
PER CENT OF AVERAGE MONTH 1930
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938

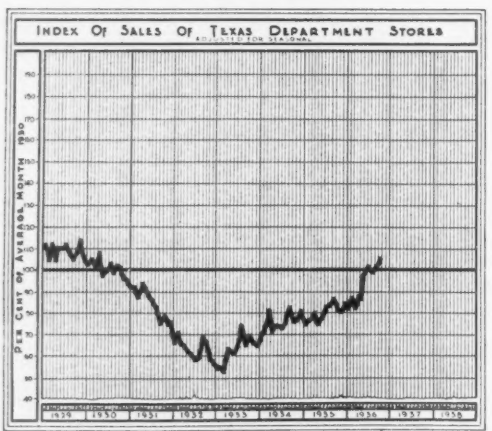
WEIGHT IN COMPOSITE INDEX = 20%


INDEX OF EMPLOYMENT AND PAY ROLLS IN TEXAS
ADJUSTED FOR SEASONAL
EMPLOYMENT
PAY ROLLS
PER CENT OF AVERAGE MONTH 1930
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938

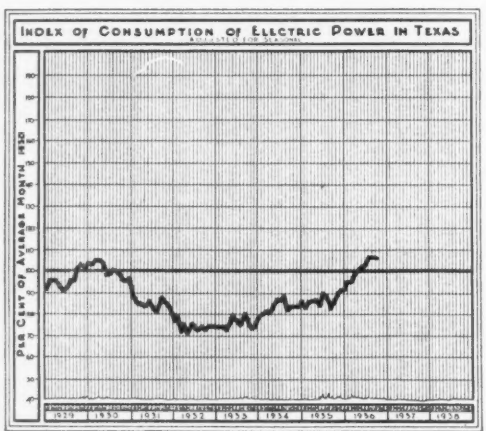
WEIGHT IN COMPOSITE INDEX
EMPLOYMENT = 25% PAY ROLLS = 25%


INDEX OF RUNS OF CRUDE OIL TO STILLS IN TEXAS
ADJUSTED FOR SEASONAL
PER CENT OF AVERAGE MONTH 1930
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938

WEIGHT IN COMPOSITE INDEX = 5%


INDEX OF SALES OF TEXAS DEPARTMENT STORES
ADJUSTED FOR SEASONAL
PER CENT OF AVERAGE MONTH 1930
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938

WEIGHT IN COMPOSITE INDEX = 10%


INDEX OF CONSUMPTION OF ELECTRIC POWER IN TEXAS
ADJUSTED FOR SEASONAL
PER CENT OF AVERAGE MONTH 1930
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938

WEIGHT IN COMPOSITE INDEX = 15%

BUREAU OF BUSINESS RESEARCH

THE UNIVERSITY OF TEXAS

(Continued from page 3)

production compared with last year helped to cause a decline from 119.4 last year to 72.8 during October of the current year. In September the index was 57. Shipments of cattle and calves during October were only about half those of the similar month last year. Retail sales in this district, as in those already cited, reflect the relative decline in farm cash income. Next to district 2, this district made the poorest comparison with October 1935.

The reader may wish to make comparisons of farm cash income with retail sales in the remaining districts similar to those already pointed out in districts 1–S, 2, and 3. Comparisons of retail sales by crop reporting districts will be found on page 12 of the REVIEW.

Although farm cash income is the principal source of income in a number of Texas crop reporting districts and thus promptly influences retail trade, in other districts it is far less dominant, although important. It will therefore not be surprising to find that while the index of farm cash income in districts 4, 8, and 9 was below that of a year ago, in each case retail sales in these districts were above the State average. To a growing extent, various regions of Texas are deriving their incomes from industry, trade, service occupations, and natural resources other than agricultural.

In the following table the index numbers for October 1936, September 1936, and October 1935 are listed for each district and for the entire State.

Index of Agricultural Cash Income

District	October 1936	September 1936	October 1935
1–N	56.4	58.6	49.4
1–S	162.6	67.8	84.9
2	62.6	76.0	83.9
3	72.8	57.0	119.4
4	85.8	92.9	86.4
5	66.0	76.2	91.1
6	104.7	59.6	62.3
7	78.7	51.6	76.7
8	79.9	55.1	84.7
9	86.8	64.4	93.1
10	74.5	77.8	78.7
State	79.8	75.9	83.2

F. A. BUECHEL.

For Other Texas Data, See Statistical Tables at the End of This Publication

Financial

The national elections and their inevitable post-mortems largely crowded business news from the spotlight during the past month. The period, however, has witnessed several significant financial developments, among which can be mentioned: the provisional stabilization of the gold bloc currencies, the pronounced shift in corporation year-end dividend policies, the continued expansion of bank credit, and some further evidence of official administration concern over the possibility of an unhealthy business boom.

Following the French departure from the gold standard late in September, the gold bloc currencies have been more or less definitely stabilized at 70 to 80 per cent of their old gold weights. Temporary stabilization has been accomplished, not by the free conversion of currency into gold, but through the use of stabilization funds to support the foreign exchange rates. The external values of these currencies, therefore, are largely artificial at the present time.

Tentative stabilization of the franc has been followed by a marked easing of interest rates in the Paris market and by the dehoarding of a considerable quantity of gold held by French citizens. Thus far, however, there has been no wholesale repatriation of French capital although there has been some return flow, largely from London. Gold has continued to flow into New York, but on a greatly reduced scale, the bulk of the metal representing dehoarded gold bought in the London market.

The federal corporation income tax law of 1936 unquestionably is producing its expected results. It will be recalled that this law imposed punitive taxation on all corporate net income not distributed as dividends. To avoid this taxation, corporations are increasing materially their disbursements to employees and to shareholders. Within the past few weeks dozens of corporations have increased their wage rates, the average advance amounting to ten per cent. In addition, numerous year-end bonuses have been voted to employees. For example, the General Foods Corporation on December 17 will pay to each employee a bonus of two weeks' extra salary. Payments of this sort obviously have the effect of reducing corporate net income.

Even more significant, however, has been the tremendous increase in dividend disbursements. Hundreds of corporations have authorized extra dividend payments of one sort or another in order to cut down the amount of undistributed net profits. Thus the Chesapeake and Ohio will pay to its stockholders $1.00 in an extra cash dividend and $2.00 in preferred stock; the Pere Marquette will pay $20.00 per share on prior preferred accumulations; and the American Smelting and Refining Company will pay an extra cash dividend of $2.25 per share. For the time being, these extra dividend payments will undoubtedly increase consumer purchasing power and stimulate retail sales. In the long run the policy will result in stripping corporations of a large part or all of their net earnings, thus compelling them to finance expansion through security sales and preventing the accumulation of needed reserves to tide over the next depression period.

Bank credit continues to expand. Adjusted demand deposits for the reporting member banks stood at an all time high of $15,206,000,000 on November 4, an increase of $90,000,000 since September 30, and of $1,648,000,000 since November 6, 1935. On November 4, these banks reported holdings of government obligations amounting to $10,503,000,000, a slight decrease

from the preceding month, but $1,129,000,000 above the figure for a year ago. On the same date, holdings of "other securities" were reported at $3,218,000,000, up $134,000,000 from a year ago.

Expansion of short term loans has been more gradual but is fully as significant. Total loans on securities of the reporting member banks aggregated $3,192,000,000 on November 4, a decline of $50,000,000 from the preceding month but an increase of $160,000,000 over the November 6, 1935, figure. This relatively small increase during a year of almost continuously rising stock prices suggests that bank credit as yet is not being used extensively to finance security speculation.

"Other loans" of the reporting member banks continue the gradual expansion which has been in evidence for more than a year. These loans represent largely commercial lending to finance the working capital needs of business enterprises. As of November 4, such loans were reported at $4,019,000,000, an increase of $400,000,000 since July 1 and of $640,000,000 in twelve months. This expansion reflects definitely the improved level of business activity and the long awaited development of an effective demand for commercial credit. Further support for such optimism is found in the volume of new security flotations. For the first nine months of this year, total corporation security issues for new capital aggregated $770,000,000, which is a better record than for any year since 1931.

Despite the improving demand for credit, the supply of loanable funds remains enormous, as a result of which interest rates and bond yields continue to rule at record low levels. Excess reserves of the member banks in mid-November were reported at $2,260,000,000. With existing reserve requirements, this sum could support an expansion of bank deposits of at least $11,300,000,000. A vastly larger expansion is possible on the basis of gold reserves held by the Federal Reserve Banks.

Past experience indicates that bank credit, once the business trend turns upward, tends to expand to the full limit of the existing reserves. Should such expansion develop at the present time, it would undoubtedly result in fantastic price inflation and an unsound business boom followed by collapse. It appears that the administration is beginning to worry somewhat over this possibility of bank credit inflation for which it has so thoroughly laid the base. Last August the Federal Reserve Board raised the legal reserve requirements of member banks by 50 per cent in order to cut down the credit base. Several weeks ago the President expressed concern over the huge volume of foreign capital which continues to flow into the United States. More recently, the Federal Reserve Board announced that another increase in legal reserve requirements is being considered as well as the possibility of some open market selling. It is to be hoped that the Board will have the courage to act decisively before the situation gets out of hand.

J. C. Dolley.

Cotton

Cotton is grown primarily for the cash received for the lint, though the by-product, cotton seed, constitutes the surest and in many ways the most valuable food and feed crop grown in the State. Prior to the depression, the sale of cotton lint accounted for about 50 per cent of the total cash income on all farms and ranches in Texas and about 80 per cent of the total cash income from crops. Certainly cotton is the hub of agricultural prosperity in Texas. The October Texas Business Review presented United States Department of Agriculture figures which showed a decline in the total cash income received from the sale of lint cotton in Texas from a three-year pre-depression average of $407,000,000 to $156,000,000 during the past two years, a decline of $251,000,000 or nearly 60 per cent.

It is proposed now to make a further analysis of these figures to see what has happened to individual farmers. Certainly the cotton growers of Texas did not receive an undue portion of the national income prior to the depression. Let us see what has happened. According to the *United States Census of Agriculture*, 1925, cotton growers in Texas received an average of $1,371 per farm in that year from the sale of lint cotton. In 1930 that income had dropped to $843 per farm, according to the Census. The Census for 1935 shows the average income to cotton growers in Texas from the sale of lint cotton to be only $401 per farm. These figures, startling as they are, do not carry the full import of the situation in so far as Texas is concerned; for during the ten years from 1925 to 1935 there was a decrease in the number of farms reporting the sale of lint cotton from 410,144 in 1925 to 364,249 in 1935, or a decrease of 45,895 farms. It is significant to note also that during that same period the total number of farms in the State increased 35,370, or from 465,647 in 1925 to 501,017 in 1935.

To what extent do Government rental and benefit payments make up for this loss? During 1935 Texas cotton growers received $47,000,000 from the Federal Government in rental and benefit payments and bonuses under the 12 cents guaranteed price. This is an average of $129 for each cotton farm, thus raising the cash income in 1935 from lint cotton from $401 to $530 per farm.

Cotton growers were dissatisfied in 1928, 1929, and 1930 because of low income; yet their income from the sale of lint cotton averaged nearly twice as much during those three pre-depression years as in 1935, even after Government bonuses are included. Can the cotton growers be expected to accept without strong protest a long continuance of the present low income?

A. B. Cox.

COTTON BALANCE SHEET

Indicated supplies of cotton in the United States November 1 were 14,365,000 bales, compared with an indicated supply of 15,451,000 bales November 1 last year. This is the smallest supply of cotton on this

date in the United States since 1929, when it was 13,444,000 bales. The indicated supply in the United States November 1 was thus 1,086,000 bales less than last year, although stocks of American cotton in European ports and afloat to Europe were 117,000 bales greater than last year. The net decrease in the above items of supply amounts to 969,000 bales.

During the past seven years the average points change in the adjusted price of New Orleans spot cotton for each change of 100,000 bales in supply has been 13.33 points. If these figures hold good for this year, the adjusted price of American cotton is due to advance about 128 points over the price at this time last year, or to an index price of 16.56 cents. When the index price is adjusted by the Bureau of Labor Statistics Wholesale Price Index and the spinners margin index of 1.1019, the indicated price for middling 7/8-inch spot cotton in New Orleans is 14.87 cents. When the calculations are based on percentages, the indicated price is 13.75 cents.

Why are calculated prices of American cotton based on supplies of American cotton more than a cent a pound above the actual prices? Many factors are involved, but the most outstanding one is the very large increase in foreign production of cotton. If United States Department of Agriculture estimates are approximately correct, the world supply of all cotton is greater than last year. As a result, prices of foreign cotton are such that these growths are being substituted freely for American cotton.

SPINNERS MARGIN

Spinners weekly ratio margins on American cotton based on the price of 32 twist yarn in Manchester and the price of middling 7/8-inch cotton in Liverpool averaged 173 during October, compared with 164 for September and 165 for October last year. The pence margin for October was 4.90 d compared with 4.47 d for September and 4.18 d for October last year. These figures indicate increasing consumption of cotton.

Texas—In Perspective

In the nature of a country lies the destiny of its people.

THE TRANS-PECOS[1]

The casual tourist perhaps considers the Trans-Pecos country as a stretch of highway to be covered as rapidly as possible, for too generally the Trans-Pecos has mainly been regarded as on the road to somewhere else; but even the hurried tourist cannot fail to catch something more than a mere impression of this country which appears to be and is "altogether different." The livestock man knows much of this interesting region of little rain, and that little rather erratic in its distribution, where widely dispersed water holes and the better range lands have long been of primary importance. Hard rock prospectors have thoroughly explored the formerly bandit-infested Big Bend country, where nature often appears so harsh and inhospitable, and on their heels has followed the archaeologist who looks in painstaking manner for keys to the life of the pre-historic peoples who long ago occupied these lands. A land of complicated geographic geology, of diverse and contrasted physiography, the meeting place of extremes in vegetation in a region of little rain, the Trans-Pecos is not for a moment to be considered as an annex to the rest of the State. Instead the Trans-Pecos country is a major item in, perhaps the major key to, the geographic geology of much of the American Southwest. Dr. Hill has stated that "Trans-Pecos Texas presents one of the most wondrous displays of earth architecture extant." And again, "The Trans-Pecos is a land of queer earth forms. . . . It is the playground of the gods or devils just as one wishes to call it, where extremes come together; where realms meet realms; where mountain systems crossed out mountain systems and where bolsom and graben valley plains vie with gigantic cuestas and laccolithic highlands. The mountains are not the highest nor the most beautiful, but they are decidedly as interesting in point of architecture and history as any elsewhere to be found. Neither are the valleys the largest, the vegetation is not the queerest, nor are the waters the most abundant; but in many other respects the Texas portion of the Trans-Pecos is one of the [most distinctive] locations of numerous and interesting types of earth forms to be found in the world. . . . The Trans-Pecos region is also the meeting place of the great geographic realms and regions and the crossing of the great period-ending mountain system" which have so largely determined the geologic architecture of the North American continent.

In area, the Trans-Pecos occupies nearly 12 per cent of the area of Texas and includes more than 31,000 square miles, or more than 20,000,000 acres. The Trans-Pecos is a huge irregularly shaped quadrangular section occupying the country between the Pecos and the Rio Grande; it extends northward into south-central New Mexico. South of the Rio Grande (the Rio Bravo section of that river forming a great elbow, in which lies the Big Bend country) are the even more inhospitable lands of northern Mexico—the great sand-filled lowlands of the Chihuahua deserts with their "lost" mountains, desert streams, and widely extending bolson plains or enclosed drainage basins without outlets.

Perhaps the most distinctive features that first meet the eye in the Trans-Pecos are the mountains—great ranges of magnificent highlands that seem to be jumbled together into vast rock masses and between which lie valleys irregular in form and broken of contour—all

[1]The writer again takes pleasure in acknowledging the great debt of gratitude he owes Dr. R. T. Hill. Texas should be particularly grateful that Dr. Hill's penetrating and comprehensive observations and studies of Texas and the Southwest continue, though they were begun nearly 65 years ago! The writer also acknowledges his debt in particular to Dr. Hill's series of articles in *The Dallas News*.

together appearing as if they had been thrown together by some mighty hand.

Much remains to be done in the geologic and physiographic investigations and interpretations of the seemingly jumbled together land forms, but the major items of outstanding importance—the mountain and plateau trends and the intervening valleys, themselves great structural features of rather definite trend also—are quite obvious.

SUBDIVISIONS OF THE TRANS-PECOS

A major line of demarcation of these complex elements is that followed by the Texas-Pacific Railway across the Trans-Pecos; north of this line the landscape partakes more of the nature of the great plateau features that are so prominent west of the Rio Grande in northern New Mexico and Arizona. The Trans-Pecos feature most representative of this upland or plateau country is the Diablo Plateau, the southern escarpment margin of which is skirted by the Texas and Pacific Railway and by the highway between Van Horn and Sierra Blanca.

South of the Southern Pacific Railway from west of Sanderson to the valley lowland of the Rio Grande at Fort Hancock is the famed but largely inaccessible Big Bend country; and occupying the highland features of the Trans-Pecos between the lines followed by Texas Pacific and Southern Pacific Railways is the plateau of the Davis Mountains, formed by great outpourings of volcanic materials. It is, of course, obvious that these railway lines follow the lines of least resistance—lowlands and passes across the Trans-Pecos region. These lines of least resistance are the negative areas, physiographically speaking; the positive areas—of scarps and rock wastes of highlands and mountainous forms—are encountered almost everywhere only a short distance away from these and other related physiographic breaks and lowland areas.

However, the mountain and highland elements vary greatly among themselves, as is the case also of the intervening elongated lowlands. Perhaps the physiographic backbone of the Trans-Pecos may be considered to be the trend of mountain ranges which extend across the Rio Grande from Mexico and extend across the Trans-Pecos in a northwest direction—a gigantic system which includes, southeast of the Davis Mountains, the Santiago Mountains and the Sierra del Carmen, the latter range being cut across by the Rio Grande, thereby forming the deep gash of the Carmen canyon; and northwest of the Davis Mountains, the Apache-Delaware-Guadalupe ranges of the great Sacramento system. The Davis Mountain plateau, surmounted by high peaks or eminences, occupies a position between these groups of ranges, sitting athwart, as it were, this master northwest-southeast zone of trends of major mountain ranges.

East of these ranges, from the Carmen to the Guadalupe ranges lie two physiographic features which are southwestern extensions of the Great Plains: The Stockton Plateau—a dissected limestone table-land—is the Trans-Pecos extension of the Edwards Plateau; and the Toyah Basin, the Texas extension of the Pecos Lowland which mostly lies northward in New Mexico.

Just west of the backbone of ranges and plateaus—the Carmen-Santiago group, the Davis Mountains, and the Apache-Delaware-Guadalupe group—lies a series of lowlands also of general northwest-southeast trend. Included in this lowland belt is the Chisos country at the south, in the Big Bend, and mostly surrounded by strong escarpments—the west-facing escarpments of the Carmen and Santiago ranges, south-facing escarpments of the Davis Mountains, and the east-facing, practically impassible escarpment of the Santa Helena Highland.

The northern unit of this lowland is occupied by the Salt Bolson which lies below and west of the gigantic escarpment of the Delaware and Guadalupe Mountains. The southern margin of this lowland extends to the Van Horn area.

And south of Van Horn, from Lobo to Marfa and beyond to Paisano Pass, the Southern Pacific Railway extends through the middle portion of this distinctive lowland belt; this middle section lies west of the Davis Mountain escarpments and may be termed Valentine-Marfa plain or bolson.

This great lowland belt comprising discontinuous elements, all of which are of a pronounced northwest-southeast trend, may be considered the negative elements, physiographically speaking, in contrast to the positive elements of the master ranges designated as the physiographic backbone of the Trans-Pecos.

Westward from this master lowland belt are: north of the Texas Pacific Railway, the Diablo Plateau whose ragged and rugged edges are in part made up of great escarpments; and south of the Texas-Pacific, such rugged and more or less isolated ranges as the Quitman Mountains, the scarped Sierra Vieja, the Chinati Mountains, and the Santa Helena Highland, through which the Rio Grande flows in the picturesque but practically inaccessible Grande Cañon de Santa Helena. Other elements may also be mentioned, such as the almost impassable east-facing escarpment of the Santa Helena Highland, the Solilario, a peculiar volcanic-formed eminence, the Boffecillas Mountains, also made up of volcanic materials, through which is cut Murderer's Canyon of the Rio Grande, and northwest of the Boffecillas Mountains is the gravel-filled lowland of the Presidio Plain, in which the town of Presidio (formerly Presidio del Norte) is situated.

To sum up: Four major though irregular, broken, and somewhat discontinuous belts of country of the Trans-Pecos have been outlined:

1. The physiographic backbone of pronounced northwest-southeast trend including the Carmen-Santiago group, the Davis Mountains and the Apache-Delaware-Guadalupe group, which also constitute the front zone of ranges first encountered in travelling westward across the Trans-Pecos. This mountain system extends far to the southeast in Mexico to the vicinity of Tampico and perhaps beyond; and it apparently is continued northwestward along the Sacramento Mountains of New Mexico and toward the site of Socorro, New Mexico.

2. Eastward from these front zone ranges, the two very unlike units which belong physiographically to the Great Plains, the eroded hard limestone country of the Stockton Plateau and the Toyah Basin covered over

with unconsolidated materials thus forming a large constructional plain.

3. The greatly varied and discontinuous lowland belt west of and roughly paralleling the west-facing escarpments of the Front Ranges. This belt includes the picturesque, ever out-of-the-ordinary Chisos country in which occur the Sierra Rosillos and the Chisos Mountains (Chisos meaning ghosts, the name so applied because of the wraith-like appearance of the white rocks of the mountain summits when wreathed in clouds); the grasslands of the Valentine-Marfa Plain or bolson; and the Salt Bolson with its salt lakes west of the great escarpment of the Guadalupe Mountains.

4. The discontinuous and irregular groups of elements west of the great lowland belt, including the Santa Helena Highland, the Boffecillas, Sierra Viejo, and the Quitman ranges, and the upland of the Diablo Plateau.

A fifth group of physiographic elements may be mentioned, for west of the Diablo Plateau foothills and extending to the Rio Grande is a vast, deeply filled-in lowland of debris, through which extends like a great canal the Rio Grande from El Paso (The Pass) southeastward to the mountain ranges and the Quitman Canyon.

Along its course through this debris-filled valley, designated as the Hueco Bolson, the Rio Grande has cut a fairly wide bench which is covered with fine-grained alluvial overwash forming the agricultural lands of the El Paso irrigated area. This is the historic El Paso region, with Paso del Norte, Ysleta, Socorro, and San Elizario, their old missions now surrounded by alfalfa lands, cotton fields, and orchards. The Hueco Bolson and the broad grama-turfed "mesas" west of the Rio Grande in New Mexico are tongue-like extensions into the United States of the great debris filled-in areas which are so prominent in the Mexican Plateau and which Dr. Hill has designated as the Chihuahua deserts. The lowlands in which Hueco Bolson occurs extends northward into New Mexico, where it is termed the Tularosa Basin; it extends to the vicinity of Alamagordo and Tularosa, and in that section a portion of it is covered by an area of white (gypsum) sands, part of which is now the White Sands National Monument.

The greographic geology of the various sections of the Trans-Pecos has determined the setting of the stage for human activities. Of primary importance are the larger physiographic features which have been so hastily sketched in the first part of this article. It is a land of low rainfall, and because of the temperatures evaporation is extreme. The expression of all these various factors is perhaps best seen in the forms of natural vegetation—much of it peculiar and aberrant, most of it armed with the "ever-on-the-defensive" spines or thorns, and almost all of it adapted to a low rainfall.

Another expression of the Trans-Pecos environment is that of its peculiar drainage or lack of it. The two rivers of the Trans-Pecos, the Rio Grande and the Pecos, are more like huge canals than like ordinary rivers in humid lands; neither the Rio Grande nor the Pecos possesses in Trans-Pecos Texas even one permanent flowing tributary! The lands lying between these streams in Texas are generally void of permanent streams.

Waterholes are so important as to be indicated on all the better maps. Great arroyas abound in many places, their sand, gravel, or boulder filled beds generally attesting to the lack of water though they rapidly become raging and dangerous torrents following heavier rains.

THE WIDER SETTING OF THE TRANS-PECOS

In a larger sense the Trans-Pecos belongs to a zone of country which extends from the Rio Grande Embayment in South Texas via the Trans-Pecos and across the varied lands of mountain ranges, "mesas" and stream valleys of southern New Mexico and Arizona to southern California and the Pacific; this zone has been appropriately designated by Dr. Hill as the Southwest Border Country. It is semi-tropic and most of it is dry enough to require irrigation for farming. Its vegetation is southwestern—cactus, in a great variety of forms, leguminous shrubs, the creosote bush and the like. Many areas, such as those characterized by lechuguilla(an agave) or ocotillo, appear as if parts of Mexico had been moved across the international boundary line. No one form of vegetation perhaps is continuous for the length of this zone (though the creosote bush is nearly so) but everywhere are common features save in the few exceptional areas which are so exceptional as to be outstanding; but even the exceptional features seem to be aligned in great kinship groups which will be noted later on. Much of this was a hard country, exceptionally so before railways and autos, before deep well drilling and windmills and the other ameliorating factors that have been introduced mostly within the past fifty years. In this zone from the Gulf of Mexico to the Pacific were located the early established Hispano-American settlements—settlements as far apart as Monclova (in northeastern Mexico) and El Paso and those on the Pacific Coast; each of these then served as bases of operation of both church and army for penetrating farther into the unknown interior. But the discontinuous line of plateaus and uplands forming the northern boundary of this Southwest Border Country constitutes today, as it did 200 or 400 years ago, not only a great barrier, but a great dividing line, north of which the Spanish influence was of small importance except in such breaks in the plateau or upland lineament, as that of the Rio Grande north of El Paso, that part of the river so often referred to by the Spanish peoples as the Rio del Norte or the Rio Grande del Norte. Because of its great importance to the pre-historic peoples, to the Spanish-established settlements, and to modern irrigated agricultural oases along its course, Dr. Hill has suggested that the Rio del Norte might well be termed the River of Life to this portion of the American Southwest.

THE BIG BEND COUNTRY

The Big Bend Country occupies the roughly triangular area in the great elbow of the Rio Grande south of the Southern Pacific Railway. The Big Bend since the time

of the publication of the Report of the United States and Mexican Boundary Survey by Major Emory in 1857 has been a region of entrancing interest. It is alike the last geologic and the last historic frontier of the United States; it is appropriately termed the last great wilderness of the Southwest. In the autumn of 1900 Robert T. Hill with five companions successfully "ran" the canyons of the Rio Bravo, as the Big Bend portion of the Rio Grande is called, from Presidio to Langtry. At that time the Big Bend was termed by many, and perhaps not inappropriately, the Bloody Bend. In the *Century Magazine* of January, 1901, Dr. Hill wrote of this section: "Every other aspect of the Big Bend Country—landscape, configuration, rocks and vegetation—is weird and strange and of a type unfamiliar to the inhabitants of other lands. The surface is a peculiar combination of desert plains and hills and mountains, the proportions of which are increased by the vast distances here reached through the crystallizing atmosphere. There is no natural feature that can be described in familiar words."

Now after a third of a century attention is being drawn again to the Big Bend as plans go forward to make the Chisos Mountain country and adjacent areas the Big Bend National Park. The Texas area of this playground is to include some million and a half acres and the Mexican government has offered to provide an additional 722,000 acres on the Mexican side which is separated from the Big Bend only by the picturesque canyoned Rio Grande.

NATURAL VEGETATION OF THE TRANS-PECOS

The natural vegetation of numerous types and forms in the various portions of the Trans-Pecos is the feature that best of all gives expression to the natural environment of the varied landscapes of this region. In general, the vegetation is of an open type, with the earth (rock surface, detrital materials and soils) commonly exposed, in contrast with denser vegetative cover characterizing sub-humid and humid lands. The woody vegetation as a rule is dwarf-like, scrubby in appearance, and often comprising only shrubs. Ecologically, the common vegetation of the Trans-Pecos includes: (a) those forms characterized by a marked development of storage or succulent tissue—the various kinds of cactus, the yucca, sotol, Agave lechuguilla, certain bulbous forms and the like; (b) those more or less dwarfed forms with a marked development of hard, compact tissues, leaves much reduced in size or leathery-like, with deep and widely branching roots, such as all-thorn, ocotillo, the mesquite, palo verde, cat's-claw, creosote bush, black brush, zizyphus, Leucophyllum and guayule; and (c) the grasses, the growing season of which is particularly determined by seasonal moisture conditions.

A woodland vegetation is found in favored areas in lowland sections, but the true forest vegetation of the Trans-Pecos occurs on the isolated higher mountain slopes and summits which are "islands" of moisture and verdure far above the intervening "seas" of the thirsty lands that surround them. These "islands" of forest characterized by their humid environment constitute scenic wonderlands in the Trans-Pecos, awaiting highways and conveniences to make them accessible for the enjoyment of tourist and student alike. In the well chosen words of Dr. Hill: "Here and there in the great Southwest border regions, often at intervals of 100 miles or more, high, timber-covered, damp mountain tops rise above the desert's floor. The Sangre de Cristo, the Sandia, the Sacramentos (all of New Mexico), the Guadalupe, the Magdalenas and the Chisos are examples of these summit cases in the deserts. Some reach above 8,000 feet. Although miles and miles apart and separated by large spaces of sterile, lower-lying desert plains where no tender greenness grows, these mountain tops are covered by tall pines, spruce and oaks and various other deciduous trees. There are ferns and grasses almost like one sees in the Colorado Mountains or in damp New England, squirrels and birds . . . and flowers, too, and fish in running brooks that disappear at the desert margin.

"Each mountain top is an island miles apart from the others and separated from one another by the arid stretches of the lower lying parched and waterless deserts; and yet the plant and animal life of each summit is as alike as if it had belonged to a once continuous humid plateau land, which has been mostly destroyed and removed away by erosion which left these island-like summits to tell the tale of former continuity. . . . If these islands were in the West Indian seas, instead of in the desert, naturalists would create all kinds of former connections between them by the similarities of plants and animals. If these tops are but the orphaned remnants of a once continuous near-level plateau region, below and between which the lower lying deserts have been dug out to depths of as much as 5,000 feet so as to destroy the former continuity of the once verdant lands, what was the mighty force that removed the vast material from regions mostly void of out reaching streamways, to transport it to the sea?"

Grasslands of the Trans-Pecos.—Grasslands and the grazing areas of the Trans-Pecos are not by any means limited to the lowland sections, though they are to be seen to good advantage in such areas, such as in the Valentine-Marfa plain or in the Marathon Basin. Into these lowland areas sinks much of the moisture run-off from adjacent slopes and ranges, and the lower sections of such areas are made up of deep fills of fine-grained alluvium, which, with the better moisture conditions, form grasslands of buffalo, grama, and mesquite grasses, very similar in appearance and characterized by the types of short grass common on the Great Plains. Other grassland areas similar in type and appearance to the grasslands of the Great Plains occur on much of the upland portions of the Diablo Plateau and on the slopes, benches, and valley lowlands of the Davis Mountains, as seen in the vicinity of Alpine or along the highway between Alpine and Fort Davis.

The distribution of live stock and of the ranch patterns of the Trans-Pecos conforms rather closely to the distribution and character of the grassland areas. For instance, the dissected limestone tableland of the Stockton Plateau section is characterized by sheep, Angora goats and cattle, although goats are scattered throughout the Big Bend Country. The Davis Mountain country, much of it with year long grazing, has been termed

the Highland Hereford country. This section and its adjacent plains have the densest distribution of cattle of the whole Trans-Pecos region. The Big Bend is noted for its large ranches and the great distances between human habitations. Most of the summit area of the Diablo Plateau and the Toyah Basin are characterized by large cattle ranches, all under fence.

ELMER H. JOHNSON.

Announcements

FARM CASH INCOME IN TEXAS 1927–1936

A bulletin by Dr. F. A. Buechel, Assistant Director, Bureau of Business Research, The University of Texas, published November 18, 1936. The bulletin is now available at $1.00 per copy.

Although Dr. Buechel has designated it as a "preliminary report," the study of farm cash income in Texas, covering a period of ten years, represents the most detailed analysis of agricultural income by districts so far attempted for the State.

Because of the great differences in types of soils and other natural conditions affecting agricultural production in Texas, it has been found that statistical data for the State as a whole are neither sufficiently definite nor adequate in answering many questions. For these reasons, for the purpose of presenting a true picture of the trend of farm cash income in the various regions of Texas, and for making comparisons among the different sections of the State, this report uses as a background the new crop reporting districts based largely upon the natural regions of the State as previously outlined by Mr. Elmer H. Johnson.

Instead of generalities covering an area of 265,896 square miles, a study has been made treating the farm cash income in each of the eleven districts as a separate unit. Even a cursory glance at figures relating to farm cash income in the different districts reveals such a wide divergence in sources of income, in amounts of cash income, and in seasonal variations of farm income, that the value of this method of treating statistical data for the State is at once recognized.

Manufacturers, wholesalers, and retailers representing practically every type of industry in the State have felt

OCTOBER RETAIL SALES OF INDEPENDENT STORES IN NEW MEXICO, OKLAHOMA, AND TEXAS

	Number of Firms Reporting Change in Sales From October 1935			From September 1936			Total Number of Firms Reporting	Percentage Change in Dollar Sales	
	Increase	Decrease	Less Than 1% Change	Increase	Decrease	Less Than 1% Change		Oct. 1936 from Oct. 1935	Oct. 1936 from Sept. 1936
TOTAL (New Mexico, Oklahoma, and Texas Combined)	744	270	24	685	308	45	1,038	+22.4	+10.2
NEW MEXICO	40	13	1	40	11	3	54	+31.3	+ 9.6
OKLAHOMA	153	80	7	159	70	11	240	+14.4	+ 8.0
TEXAS	551	177	16	486	227	31	744	+23.7	+10.6
TEXAS STORES GROUPED BY LINE OF GOODS CARRIED:									
APPAREL	94	4	1	89	8	2	99	+40.5	+23.3
Family Clothing Stores	25	2	....	24	2	1	27	+37.3	+25.5
Men's and Boys' Clothing Stores	40	....	....	38	2	....	40	+42.8	+24.0
Shoe Stores	6	....	1	4	3	....	7	+29.2	− 0.3
Women's Specialty Shops	23	2	....	23	1	1	25	+41.3	+24.4
AUTOMOTIVE	51	41	3	38	54	3	95	+11.5	− 7.4
Filling Stations	22	8	1	20	10	1	31	+19.5	+ 7.5
Motor Vehicle Dealers	29	33	2	18	44	2	64	+11.0	− 8.3
COUNTRY GENERAL AND FARMERS' SUPPLIES	66	22	2	64	23	3	90	+18.4	+10.5
DEPARTMENT STORES	48	5	1	48	4	2	54	+26.9	+15.7
DRUG STORES	103	40	7	68	67	15	150	+ 8.9	+ 1.3
FOOD	105	32	....	111	23	3	137	+13.8	+10.8
Grocery Stores	28	9	....	30	7	....	37	+11.9	+ 9.0
Grocery-and-Meat Stores	77	23	....	81	16	3	100	+14.4	+11.3
FURNITURE AND HOUSEHOLD	23	8	....	19	12	....	31	+17.3	+ 5.4
Furniture Stores	15	4	....	14	5	....	19	+22.1	+10.4
Household Appliance Stores	5	2	....	1	6	....	7	− 5.3	−21.5
Other Home Furnishings Stores	3	2	....	4	1	....	5	+ 8.5	+16.5
JEWELRY STORES	8	4	....	7	5	....	12	+56.2	+110.9
LUMBER, BUILDING, AND HARDWARE	40	17	....	30	25	2	57	+19.8	+ 2.2
Hardware Stores	19	6	....	15	9	1	25	+17.6	+11.9
Lumber and Building Material Dealers	18	10	....	12	15	1	28	+18.9	− 4.4
Other Lumber, Building, and Hardware Stores	3	1	....	3	1	....	4	+43.9	+12.6
RESTAURANTS	10	3	2	9	5	1	15	+ 8.5	+ 3.9
ALL OTHER STORES	3	1	....	3	1	....	4	+11.3	+11.3
TEXAS STORES GROUPED ACCORDING TO POPULATION OF CITY:									
All Stores in Cities of—									
OVER 100,000 POPULATION	152	23	....	116	53	6	175	+29.5	+11.9
50,000–100,000 POPULATION	57	9	....	56	10	....	66	+26.2	+22.5
2,500–50,000 POPULATION	232	90	10	220	96	16	332	+14.2	+ 5.5
LESS THAN 2,500 POPULATION	110	55	6	94	68	9	171	+ 8.0	+ 1.5

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, coöperating with the United States Department of Commerce.

the need for more detailed information regarding farm cash income. The needs of industrialists and wholesale and retail distributors for information concerning possible market developments have been kept in mind in compiling this report, and the charts and tables accompanying the text have been arranged to afford the most clear-cut picture of present conditions and future trends at present obtainable.

Further studies on income, production, and consumption are being carried on by the Bureau of Business Research; but because of the demand for the information contained in this bulletin on farm cash income in Texas, it has been considered advisable to present the material for distribution without delay.

The following organizations will hold meetings in Texas during December and early January:

Texas Hotel Association, December 14–15, San Antonio.

Southwestern Drug Corporation, December 29–January 2, Dallas.

Southwestern Life Insurance Company, December 29–January 2, Dallas.

Texas Agricultural Association, December 29–January 2, Dallas.

Texas Daily Press League, December 29–January 2, Dallas.

American National Livestock Association, January 12–14, El Paso.

TEXAS COMMERCIAL FAILURES

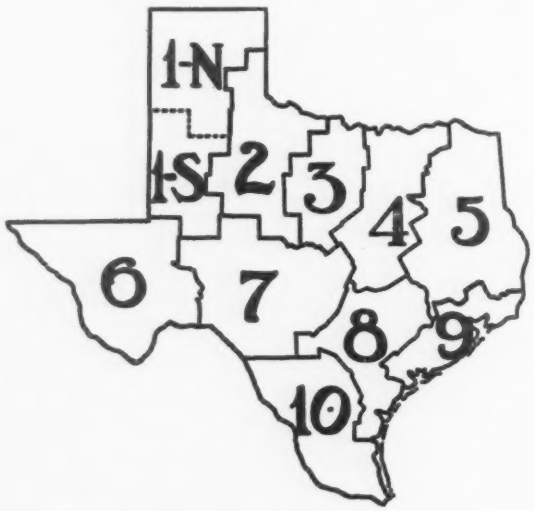
	Oct. 1936	Oct. 1935	Sept. 1936
Number	7	11	9
Average Weekly Number	2	3	2
Liabilities‖	$ 62	$160	$114
Assets‖	$ 12	$ 32	$ 26
Average Liabilities per Failure‖	$ 9	$ 15	$ 13

‖In thousands.

NOTE: From Dun and Bradstreet, Inc.

OCTOBER RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	Total Number of Firms Reporting	Percentage Change in Dollar Sales Oct. 1936 from Oct. 1935	Oct. 1936 from Sept. 1936
TOTAL TEXAS	744	+23.7	+10.6
TEXAS STORES GROUPED BY PRODUCING AREAS:			
DISTRICT 1-N	38	+13.2	+ 6.5
Amarillo	11	+ 6.2	+ 8.8
Pampa	3	+33.7	− 3.2
Plainview	6	+ 8.2	+14.1
All Others	18	+16.0	+ 7.8
DISTRICT 1-S	22	+34.3	+29.9
Big Spring	4	+ 2.4	+ 1.3
Lubbock	14	+34.5	+27.7
All Others	4	+50.8	+72.1
DISTRICT 2	70	− 4.2	+ 4.2
Abilene	10	+17.2	− 2.3
Vernon	5	− 8.6	+16.5
Wichita Falls	10	−11.2	+ 5.3
All Others	45	− 8.5	+ 5.9



	Total Number of Firms Reporting	Percentage Change in Dollar Sales Oct. 1936 from Oct. 1935	Oct. 1936 from Sept. 1936
DISTRICT 3	18	+ 4.8	+17.2
Brownwood	3	+29.1	+42.6
All Others	15	− 5.2	+ 6.5
DISTRICT 4	183	+30.2	+17.6
Cleburne	10	+30.0	+32.7
Corsicana	9	− 0.5	+14.7
Dallas	48	+33.4	+19.0
Fort Worth	23	+30.0	+21.4
Greenville	3	+33.1	+ 4.3
Paris	3	+99.9	− 8.7
Sherman	5	+27.1	+14.0
Taylor	9	+17.0	− 1.0
Temple	7	+25.8	+22.2
Waco	14	+24.6	+27.7
All Others	52	+ 4.2	− 3.8
DISTRICT 5	80	+12.4	− 0.1
Bryan	9	+11.0	− 9.8
Longview	6	−14.2	− 7.1
Marshall	8	+27.8	+19.5
Nacogdoches	3	−25.9	−11.4
Tyler	9	+16.0	− 9.0
All Others	45	+16.5	+ 6.0
DISTRICT 6	33	+21.8	+ 3.5
El Paso	23	+21.9	+ 2.8
All Others	10	+21.0	+11.7
DISTRICT 7	27	+17.8	+15.8
San Angelo	16	+16.7	+25.2
All Others	11	+20.8	− 2.2
DISTRICT 8	113	+23.9	+ 3.8
Austin	17	+24.8	+17.7
Corpus Christi	6	+ 7.9	−18.3
San Antonio	31	+31.0	+ 3.9
All Others	59	+ 7.4	− 4.2
DISTRICT 9	107	+24.9	+ 8.3
Beaumont	13	+32.6	+23.4
Galveston	11	+15.8	+20.1
Houston	51	+24.8	+ 4.3
Port Arthur	11	+30.6	+26.8
All Others	21	+15.2	− 0.1
DISTRICT 10	53	+13.6	+ 1.5
Brownsville	18	+13.9	+ 2.4
Harlingen	10	+19.4	−11.2
All Others	25	+11.6	+ 6.1

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, coöperating with the United States Department of Commerce.

OCTOBER CREDIT RATIOS IN TEXAS RETAIL STORES

(Expressed in Per Cent)

	Number of Stores Reporting	Ratio of Credit Sales to Net Sales 1936	1935	Ratio of Collections to Outstandings 1936	1935	Ratio of Credit Salaries to Credit Sales 1936	1935
All Stores	58	62.9	63.3	39.0	37.7	0.9	1.2
Stores Grouped by Cities:							
Abilene	4	57.5	56.2	34.6	33.1	1.4	1.6
Austin	3	59.2	58.7	43.6	42.7	0.9	1.0
Beaumont	3	62.4	62.6	46.5	38.0	1.2	1.2
Dallas	8	67.7	70.2	40.0	37.3	0.8	1.0
Fort Worth	6	60.2	59.9	35.9	33.4	1.0	1.3
Galveston	3	72.1	74.4	42.2	39.6	1.3	1.8
Houston	8	63.0	62.2	40.3	42.3	1.2	1.4
San Antonio	4	58.8	59.9	35.3	38.6	0.7	0.9
Waco	4	61.9	60.3	40.3	35.3	1.0	1.1
All Others	15	58.8	58.4	39.2	36.5	1.2	1.4
Stores Grouped According to Type of Store:							
Department Stores (Annual Volume Over $500,000)	17	61.5	62.0	37.9	37.7	0.9	1.1
Department Stores (Annual Volume Under $500,000)	14	58.8	58.6	38.9	35.2	1.4	1.5
Dry Goods–Apparel Stores	4	58.4	58.4	32.3	31.9	1.4	1.7
Women's Specialty Shops	9	67.8	69.0	41.0	37.1	0.6	0.8
Men's Clothing Stores	14	67.7	68.5	44.3	40.9	1.2	1.5
Stores Grouped According to Volume of Net Sales During 1935:							
$3,750,000 down to $2,250,000	7	62.3	63.9	37.7	37.8	0.8	1.0
$2,250,000 down to $1,000,000	10	61.4	60.2	38.3	37.7	0.9	1.1
$1,000,000 down to $275,000	17	59.4	58.0	42.9	44.1	1.1	1.3
Less than $275,00	24	61.7	59.8	43.1	41.5	1.6	2.0

NOTE: The ratios shown for each year, in the order in which they appear from left to right, are obtained by the following computations: (1) Credit sales divided by net sales. (2) Collections during the month divided by the total accounts unpaid on the first of the month. (3) Salaries of the credit department divided by credit sales.
The data are reported to the Bureau of Business Research by Texas retail stores.

LUMBER

(In Board Feet)

	Oct. 1936	Oct. 1935	Sept. 1936
Southern Pine Mills:			
Average Weekly Production per Unit	315,042	298,869	312,762
Average Weekly Shipments per Unit	343,178	295,543	346,881
Average Unfilled Orders per Unit, End of Month	741,829	660,019	736,589

NOTE: From Southern Pine Association.

CONSUMPTION OF ELECTRIC POWER IN TEXAS

	Power Consumed (In Thousands of K.W.H.) Oct. 1936	Oct. 1935	Sept. 1936	Percentage Change Oct. 1936 from Oct. 1935	Oct. 1936 from Sept. 1936
Commercial	32,259	27,022	36,466	+19.4	−11.5
Industrial	80,146	63,180	80,683	+26.9	− 0.7
Residential	23,576	19,324	24,811	+22.0	− 5.0
All Other	18,521	16,068	19,859	+15.3	− 6.7
TOTAL	154,502	125,594	161,819	+23.0	− 4.5

NOTE: Prepared from reports from 16 electric companies to the Bureau of Business Research.

COTTON MANUFACTURING IN TEXAS

	Oct. 1936	Oct. 1935	Sept. 1936
Bales of Cotton Used	4,025	2,470	4,092
Yards of Cloth:			
Produced	4,320,599	3,555,634	4,603,123
Sold	4,849,266	4,419,608	4,531,607
Unfilled Orders	10,566,958	5,468,893	8,947,103
Active Spindles	110,262	76,628	109,376
Spindle Hours‖	36,670	20,363	36,213

‖In thousands.
NOTE: Reported to the Bureau of Business Research by 12 Texas cotton mills.

OCTOBER CARLOAD MOVEMENT OF POULTRY AND EGGS

	Cars of Poultry: Live Chickens 1936	1935	Live Turkeys 1936	1935	Dressed Chickens 1936	1935	Dressed Turkeys 1936	1935	Cars of Eggs 1936	1935
Shipments from Texas Stations										
TOTAL					6	2	3		32	31
Intrastate					3		1		14	8
Interstate					3	2	2		18	23
Receipts at Texas Stations										
TOTAL					4	1			40	8
Intrastate					4				11	8
Interstate						1			29	

NOTE: These data are furnished the U. S. Department of Agriculture, Division of Crop and Livestock Estimates, by railway officials through agents at all stations which originate and receive carload shipments of poultry and eggs. The data are compiled by the Bureau of Business Research.

TEXAS CHARTERS

	Oct. 1936	Oct. 1935	Sept. 1936
Domestic Corporations:			
Capitalization‖	$6,277	$1,078	$1,639
Number	123	100	123
Classification of new corporations:			
Banking-Finance	11	5	5
Manufacturing	18	14	19
Merchandising	33	36	30
Oil	20	26	38
Public Service	2		1
Real Estate-Building	6	8	4
Transportation	3		1
All Others	30	11	25
Number capitalized at less than $5,000	45	33	55
Number capitalized at $100,000 or more	5	1	3
Foreign Corporations (Number)	28	19	31

‖In thousands.
NOTE: Compiled from records of the Secretary of State.

COMMODITY PRICES

	Oct. 1936	Oct. 1935	Sept. 1936
WHOLESALE PRICES:			
U. S. Bureau of Labor Statistics (1926 = 100)	81.5	80.5	81.6
The Annalist (1913 = 100)	127.2	129.2	127.8
	75.1¶	76.6¶	75.8¶
FARM PRICES:			
U. S. Department of Agriculture (1910–14 = 100)	121.0	109.0	124.0
U. S. Bureau of Labor Statistics (1926 = 100)	84.0	78.2	84.0
RETAIL PRICES:			
Food (U. S. Bureau of Labor Statistics, 1923–25 = 100)	82.8	80.5	84.3
Department Stores (Fairchild's Publications, Jan. 1931 = 100)	90.0	87.6	89.3

¶In old gold dollar, based on exchange quotations for France, Switzerland, and Holland to September 22, 1936.

CEMENT

(In Thousands of Barrels)

	Oct. 1936	Oct. 1935	Sept. 1936
Texas Plants—			
Production	543	283	595
Shipments	531	314	450
Stocks	743	611	731†
United States—			
Production	12,470	7,510	12,292
Shipments	13,089	8,794	12,564
Stocks	18,119	20,501	18,738†
Capacity Operated	56.0%	33.1%	57.1%

†Revised.

NOTE: From U. S. Department of Interior, Bureau of Mines.

POSTAL RECEIPTS

	Oct. 1936	Oct. 1935	Sept. 1936
Abilene	$ 17,683	$ 15,867	$ 14,233
Amarillo	30,791	25,906	27,382
Austin	60,399	61,315	59,093
Beaumont	23,569	21,404	21,251
Big Spring	5,891	5,884	4,833
Brownsville	6,291	7,213	5,326
Brownwood	5,880	5,721	5,537
Corpus Christi	19,713	15,020	17,446
Dallas	430,590	361,769	363,619
Del Rio	4,336	3,292	3,146
Denison	4,900	4,810	4,207
El Paso	43,860	41,250	39,894
Fort Worth	168,708	139,781	143,526
Galveston	26,538	24,369	24,241
Harlingen	4,787	4,516	4,637
Houston	224,548	204,650	199,054
Jacksonville	3,150	3,187	2,954
Longview	10,877	10,018	7,724
Lubbock	14,924	13,302	15,715
McAllen	3,643	3,193	3,182
Marshall	6,050	6,169	5,008
Palestine	4,576	5,056	4,499
Pampa	7,230	7,206	5,179
Paris	6,388	6,008	5,514
Plainview	3,844	4,158	3,309
Port Arthur	10,493	11,122	9,915
San Angelo	13,127	10,558	9,360
San Antonio	115,703	109,179	106,844
Sherman	8,005	7,456	7,163
Snyder	1,303	1,368	1,307
Sweetwater	4,986	5,265	5,138
Waco	35,037	34,005	30,210
Wichita Falls	21,591	22,076	18,889
TOTAL	$1,349,411	$1,202,093	$1,179,335

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

PETROLEUM

Daily Average Production

(In Barrels)

	Oct. 1936	Oct. 1935	Sept. 1936
Coastal Texas¶	179,700	193,640	253,920
East Central Texas	70,600	44,730	62,800
East Texas	439,100	427,100	435,210
North Texas	65,250	59,260	61,090
Panhandle	61,800	55,530	61,370
Southwest Texas	170,000	61,130	85,620
West Central Texas	33,850	25,510	26,990
West Texas	169,100	155,250	172,320
STATE	1,189,400	1,022,150	1,159,320
UNITED STATES	3,058,750	2,776,090	3,016,850
Imports	165,786	131,000	166,057

¶Includes Conroe.

NOTE: From American Petroleum Institute.

Gasoline sales as indicated by taxes collected by the State Comptroller were: September 1936, 92,183,000 gallons; September 1935, 78,630,000 gallons; August 1936, 98,377,000 gallons.

STOCK PRICES

	Oct. 1936	Oct. 1935	Sept. 1936
Standard Indexes of the Securities Markets:			
419 Stocks Combined	118.7	85.2	114.1
347 Industrials	136.0	98.5	130.2
32 Rails	58.4	34.3	55.4
40 Utilities	109.1	81.0	107.7

NOTE: From Standard Statistics Co., Inc.

BUILDING PERMITS

	Oct. 1936	Oct. 1935	Sept. 1936
Abilene	$ 13,765	$ 9,395	$ 7,310
Amarillo	543,601	47,138	59,559
Austin	221,696	189,983¶	576,881
Beaumont	106,447	68,114	61,637
Big Spring	10,110	4,305	13,420
Brownsville	7,575	59,155	4,490
Brownwood	1,500	32,312	2,015
Corpus Christi	230,505	74,120	212,305
Corsicana	19,535	3,830	6,063
Dallas	868,353	744,340	688,211
El Paso	103,450	53,823	56,152
Fort Worth	522,533	350,775	414,949
Galveston	92,039	45,584	166,923
Houston	2,296,387	663,340	1,077,594
Jacksonville	8,125	200	2,750
Laredo	1,450	5,160	10,560
Lubbock	109,945	57,333	112,967
McAllen	23,100	5,600	4,200
Marshall	31,474	7,480	35,192
Palestine	13,521	17,618	31,095
Pampa	23,250	8,600	43,050
Paris	6,590	9,726	9,150
Plainview	6,900¶	5,000	650
Port Arthur	79,633	27,111	69,519
San Angelo	94,050	11,115	12,670
San Antonio	428,936	220,903	258,593
San Benito	5,175	1,200	135
Sherman	35,137	6,242	17,114
Snyder	2,600	400	500
Sweetwater	9,645	6,060	4,127
Waco	60,320	1,256,933	83,703
Wichita Falls	16,852	17,445	37,945
TOTAL	$5,994,199	$4,010,340	$4,081,429

¶Does not include public works.

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

COTTON BALANCE SHEET IN THE UNITED STATES AS OF NOVEMBER 1

(In Thousands of Running Bales Except as Noted)

	Carryover Aug. 1	Imports to Nov. 1¶	Government Estimate as of Nov. 1§	Total	Consumption to Nov. 1§	Exports to Nov. 1§	Total	Balance Nov. 1
1929–1930	2,313	69	15,009	17,391	1,744	2,203	3,947	13,444
1930–1931	4,530	11	14,438	18,979	1,189	2,273	3,462	15,517
1931–1932	6,369	15	16,903	23,287	1,350	1,783	3,133	20,154
1932–1933	9,682	18	11,947	21,647	1,399	2,194	3,593	18,054
1933–1934	8,176	33	13,100	21,309	1,592	2,445	4,037	17,272
1934–1935	7,746	30	9,634	17,410	1,237	1,322	2,559	14,851
1935–1936	7,138	22	11,141	18,301	1,412	1,440	2,852	15,449
1936–1937	5,397	32	12,400	17,829	1,851	1,613	3,464	14,365

The cotton year begins August 1. ¶In 500-pound bales. §In running bales, counting round bales as half bales.

NOTE: The figures have been revised in accordance with the revisions made by the United States Bureau of the Census.

OCTOBER SHIPMENTS OF LIVE STOCK CONVERTED TO A RAIL-CAR BASIS§

	Cattle		Calves		Hogs		Sheep		Total	
	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935
Total Interstate Plus Fort Worth¶	3,536	4,355	1,226	1,374	388	188	473	720	5,623	6,637
Total Intrastate Omitting Fort Worth	1,374	1,717	159	184	47	5	630	371	2,210	2,277
TOTAL SHIPMENTS	4,910	6,072	1,385	1,558	435	193	1,103	1,091	7,833	8,914

TEXAS CAR-LOT§ SHIPMENTS OF LIVE STOCK JANUARY 1, 1936, TO NOVEMBER 1, 1936

	Cattle		Calves		Hogs		Sheep		Total	
	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935
Total Interstate Plus Fort Worth¶	32,731	35,919	6,490	7,189	5,519	2,744	4,078	4,052	48,818	49,904
Total Intrastate Omitting Fort Worth	6,989	10,441	1,194	1,491	393	123	1,143	1,055	9,719	13,110
TOTAL SHIPMENTS	39,720	46,360	7,684	8,680	5,912	2,867	5,221	5,107	58,537	63,014

§Rail-car Basis: Cattle, 30 head per car; calves, 60; hogs, 80; and sheep, 250.

¶Fort Worth shipments are combined with interstate forwardings in order that the bulk of market disappearance for the month may be shown.

NOTE: These data are furnished the United States Bureau of Agricultural Economics by railway officials through more than 1,500 station agents, representing every live stock shipping point in the State. The data are compiled by the Bureau of Business Research.

BANKING STATISTICS

(In Millions of Dollars)

	Oct. 1936		Oct. 1935		Sept. 1936	
	Dallas District	United States	Dallas District	United States	Dallas District	United States
DEBITS to individual accounts	779	35,298	644	30,610	734	33,115
Condition of reporting member banks on—	Oct. 28, 1936		Oct. 30, 1935		Sept. 30, 1936	
ASSETS:						
Loans and investments—total	511	22,517	448	20,378	490	22,682
Loans to brokers and dealers:						
In New York City	.....	933	.....	779	.....	972
Outside New York City	3	220	1	152	3	222
Loans on securities to others (except banks)	42	2,026	‡	2,075	42	2,048
Acceptances and commercial paper bought	1	313	1	329	1	311
Loans on real estate	23	1,143	22	1,146	23	1,139
Loans to banks	.....	53	‡	81	.....	112
Other loans	160	4,033	‡	3,340	151	3,949
U. S. Government direct obligations	191	9,274	164	8,177	185	9,336
Obligations fully guaranteed by U. S. Government	41	1,257	50	1,133	37	1,356
Other securities	50	3,265	43	3,166	48	3,337
Reserve with Federal Reserve Banks	101	5,390	64	4,632	96	5,023
Cash in vault	11	405	10	350	9	378
Due from Domestic banks	173	2,371	‡	2,219	173	2,363
Other assets—net	29	1,303	‡	1,367	28	1,341
LIABILITIES:						
Demand deposits—adjusted	369	15,340	‡	13,598	361	15,116
Time deposits	121	5,065	‡	4,899	120	5,063
U. S. Government deposits	41	704	20	547	43	847
Inter-bank deposits:						
Domestic banks	209	6,041	‡	5,224	190	5,919
Foreign banks	1	467	‡	373	.....	484
Borrowings	.....	.....	‡	.....	.....	.....
Other liabilities	6	849	‡	801	5	848
Capital account	78	3,520	‡	3,504	77	3,510

‡Not available.

NOTE: From Federal Reserve Board.

OCTOBER EMPLOYMENT AND PAY ROLLS IN TEXAS CLASSIFIED BY CITIES AND EMPLOYMENT GROUPS

Pay Rolls Ending Nearest Fifteenth of Month

	No. of Establishments	Workers: Number Oct. 1936	Workers: Percentage Change from Oct. 1935	Workers: Percentage Change from Sept. 1936	Pay Roll: Dollars Oct. 1936	Pay Roll: Percentage Change from Oct. 1935	Pay Roll: Percentage Change from Sept. 1936	Average Weekly Wage per Worker: Oct. 1936	Oct. 1935	Sept. 1936
Abilene	18	270	+ 5.9	+ 0.7	$ 5,648	+ 9.1	+ 4.2			
Amarillo	43	961	+29.0	+ 1.9	21,988	+33.6	+ 1.5			
Austin	22	669	+13.2	− 7.9	14,445	+19.0	− 8.4			
Beaumont	36	3,512	+ 5.6	− 3.8	80,138	+10.0	− 1.7			
Corpus Christi	5	254	+30.3	+ 0.4	3,360	+36.1	+ 0.7			
Dallas	159	10,049	+14.2	+ 1.4	225,936	+19.1	+ 3.0			
Denison	7	930	+ 4.0	+ 0.6	12,271	− 5.2	+ 8.2			
El Paso	63	2,159	+11.4	− 0.1	41,260	+17.9	+ 3.2			
Fort Worth	75	7,012	+ 5.5	+ 0.8	138,355	+11.9	+ 0.5			
Galveston	18	684	+13.6	+ 6.7	16,492	+11.0	+ 5.1			
Houston	147	11,052	+11.6	+ 1.4	262,158	+19.5	+ 3.7			
Laredo	9	208	+ 6.1	− 1.9	2,582	+14.3	− 2.3			
Lubbock	8	265	+23.8	+ 5.6	3,858	+33.8	− 4.9			
Port Arthur	12	7,341	− 8.4	− 2.1	196,875	+ 2.7	− 1.7			
San Angelo	7	109	+10.1	− 1.8	2,020	+12.3	− 2.9			
San Antonio	99	3,764	+ 8.7	+ 0.9	71,701	+15.0	+ 1.9			
Sherman	11	591	+10.9	− 5.6	8,569	+20.7	−12.3			
Tyler	5	240	+34.1	+ 8.6	4,791	+32.9	+ 5.9			
Waco	35	1,541	+12.5	+ 1.8	26,692	+14.9	+ 0.6			
Wichita Falls	27	640	+ 6.5	− 2.1	14,062	+10.9	+ 1.6			
All Other Cities	711	28,410	+11.9	− 0.2	686,158	+14.2	+ 1.8			
STATE	1,517	80,661	+ 9.1	0.0	1,839,359	+14.0	+ 1.5			
BUILDING MATERIALS	108	7,682	+19.5	− 3.7	150,830	+28.5	− 3.2	$19.63	$18.27	$19.53
Brick, Tile, Terra Cotta	9	340	+56.7	− 8.1	4,162	+96.1	− 1.2	12.24	9.78	11.38
Cement	7	1,147	+24.4	− 1.1	23,114	+24.8	− 2.6	20.15	20.08	20.46
Foundries, Machine Shops	28	1,964	+27.7	− 1.4	46,983	+43.4	− 0.8	23.92	21.30	23.79
Millwork	17	555	+23.6	+ 0.2	11,274	+33.9	− 2.8	20.31	18.75	20.93
Quarrying	23	843	+ 1.0	−12.6	22,055	+10.8	− 4.0	26.16	23.83	23.79
Saw Mills	12	2,244	+16.6	− 1.4	32,336	+26.4	− 0.8	14.41	13.29	14.32
Structural Iron Works	5	507	+ 7.6	−11.2	9,308	+ 4.0	−20.4	18.36	19.01	20.48
All Other Building Materials	7	82	+17.1	−10.9	1,598	+36.9	− 7.0	19.49	16.67	18.68
CHEMICALS¶	17	420	−10.3	− 1.2	8,329	− 2.2	− 1.4	19.83	18.20	19.88
CLOTHING AND TEXTILES	26	2,198	+25.5	− 2.8	25,115	+26.0	− 0.1	11.43	11.38	11.12
Cotton Textile Mills	5	697	+39.4	−16.2	8,417	+43.0	− 9.9	12.08	11.77	11.23
Men's Clothing Manufacturing	7	883	+15.0	+ 2.7	9,100	+14.9	+ 4.2	10.31	10.31	10.15
Women's Clothing Manufacturing	5	173	+47.9	+16.9	1,907	+47.5	+32.2	11.02	11.05	9.75
Other Clothing and Textile Manufacturing	9	445	+21.6	+ 5.7	5,691	+17.8	+ 1.1	12.79	13.20	13.37
COTTON OIL MILLS	15	673	− 7.0	+ 1.8	9,563	+ 9.0	+ 8.6	14.21	12.11	13.32
DISTRIBUTION	604	19,103	+10.6	+ 5.1	379,955	+14.7	+ 5.2	19.89	19.19	19.87
Retail Trade	380	13,756	+ 9.9	+ 6.7	241,758	+13.4	+ 7.6	17.57	17.04	17.43
Wholesale Trade	224	5,347	+12.5	+ 1.2	138,197	+17.0	+ 1.2	25.85	24.85	25.84
FOOD PRODUCTS	73	5,783	+ 2.8	− 3.1	116,179	+ 6.1	− 2.6	20.09	19.46	20.00
Bakeries	21	718	+14.1	+ 1.1	14,079	+21.6	+ 2.3	19.61	18.41	19.39
Beverages	10	219	+37.7	−11.3	4,909	+43.2	−12.9	22.42	21.56	22.81
Confectioneries	7	230	+ 7.5	+12.7	3,055	+11.1	+16.7	13.28	12.86	12.83
Flour Mills	5	338	− 6.1	+ 0.6	7,412	+ 2.1	+ 2.6	21.93	20.16	21.50
Meat Packing, Slaughtering	8	3,249	+ 0.4	− 2.9	70,517	+ 4.0	− 2.6	21.70	20.96	21.65
All Other Food Products	22	1,029	+ 0.2	− 8.4	16,207	− 2.5	− 8.0	15.75	16.18	15.69
FOREST PRODUCTS	16	680	− 0.9	− 4.9	12,283	+ 6.4	− 4.9	18.06	16.83	18.06
FURNITURE MANUFACTURING	7	507	+23.7	− 2.9	9,833	+47.8	− 3.4	19.39	16.23	19.50
PETROLEUM	52	21,646	+ 4.6	− 1.7	619,436	+12.4	+ 0.7	28.62	26.63	27.92
Crude Petroleum Producing	21	4,242	+ 5.6	− 2.8	143,790	+ 9.2	− 1.1	33.90	32.77	33.33
Petroleum Refining	31	17,404	+ 4.3	− 1.5	475,646	+13.4	+ 1.2	27.33	25.15	26.59
PRINTING AND PUBLISHING	45	1,586	+ 5.7	+ 1.7	51,275	+ 7.1	+ 2.0	32.33	31.91	32.21
Commercial Printing	21	348	+ 2.7	− 2.2	9,161	+ 6.3	+ 0.8	26.32	25.43	25.53
Engraving	7	135	+ 6.3	+ 8.9	4,073	− 5.9	+ 2.7	30.17	34.09	31.97
Newspaper Publishing	17	1,103	+ 6.7	+ 2.1	38,041	+ 9.0	+ 2.3	34.49	33.77	34.44
PUBLIC UTILITIES	361	12,963	+ 8.1	+ 0.7	331,908	+10.2	+ 2.8	25.60	25.12	25.08
Electric Railway and Motor Bus Operation	9	1,473	+18.8	− 0.6	35,649	+32.6	+ 2.0	24.20	21.68	23.59
Electric Railway Repair Shops	7	148	+ 1.4	+ 2.8	3,673	+ 7.3	+ 3.1	24.82	23.44	24.73
Natural Gas Distribution	36	1,651	− 9.4	− 0.7	37,375	− 8.4	+ 2.2	22.64	22.40	21.99
Power and Light	292	7,222	+10.1	+ 0.6	191,866	+ 8.5	+ 1.6	26.57	26.96	26.31
Steam Railroad Car Shops	17	2,469	+10.9	+ 2.8	63,345	+18.9	+ 7.7	25.66	23.93	24.48
SERVICE	101	4,618	+15.2	− 1.6	66,051	+21.8	− 1.2	14.30	13.53	14.25
Business and Personal Service	27	670	+12.0	− 6.4	13,540	+31.1	− 3.8	20.21	17.27	19.67
Hotels	28	2,684	+21.3	+ 2.5	33,215	+28.0	+ 3.0	12.38	11.74	12.31
Ice	27	242	− 5.1	−13.6	4,582	− 2.5	−12.0	18.93	18.43	18.59
Laundries, Dyeing and Cleaning	19	1,022	+ 8.1	− 5.2	14,714	+10.9	− 4.2	14.40	14.03	14.24
ALL OTHER INDUSTRIES	92	2,802	+17.5	+ 1.3	58,602	+30.8	+ 4.9	20.91	18.79	20.19
STATE	1,517	80,661	+ 9.1	0.0	$1,839,359	+14.0	+ 1.5	$22.80	$21.81	$22.48

¶Chemical and Allied Industries not elsewhere classified.

Note: Prepared from reports from Texas industrial establishments to the Bureau of Business Research, coöperating with the United States Bureau of Labor Statistics.